

EMC TEST REPORT

Report Number	: 68.720.13.040	Date of Is	sue: 23 May 2013
Model	: LE3933, LE-D	3902	
Product Type	: 39" LED TV		
Applicant	: Wanlida Grou	p Co., Ltd.	
Address	: No. 618, Jiahe	e Road, Wanlida Indust	ry Zone, Xiamen, Fujian, China
Production Facility	: Wanlida Grou	p Co., Ltd.	
Address	: Wanlida Indus	stry Zone, Nanjing, Fuji	an, China 363601
Test Result	: Positive	☐ Negative	
Total pages including Appendices	: 67		

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1 Table of Contents

1	Table of Contents	2
2	Details about the Test Laboratory	3
3	Description of the Equipment Under Test	4
4	Summary of Test Standards	5
5	Summary of Test Results	6
6	General Remarks	7
7	Technical Requirements 7.1 Conducted Emissions AC Power Port 7.2 Radiated emissions 7.3 Antenna conducted power	8 22
	7.5 Antenna conducted power	04



2 Details about the Test Laboratory

Details about the Test Laboratory

Test Site 1

Company name: Jiangsu TÜV Product Service Ltd. Shenzhen Branch

6th Floor, H Hall, Culture Creative Park, No. 4001, Fuqiang Road,

Futian District 518048, Shenzhen, P.R.C.

Telephone: 86 755 8828 6998 Fax: 86 755 8828 5299

Test Site 2

Company name: Waltek Services (Shenzhen) Co., Ltd.

1/F, Fukangtai Building, West Baima Rd,

Songgang Street, Baoan District, ShenZhen, Guangdong, China.

Telephone: +86-755-8355 1033 Fax: +86-755-2355 2400

Report Number: 68.720.13.040.01 Page 3 of 67



3 Description of the Equipment Under Test

Description of the Equipment Under Test

Product: 39" LED TV

Model no.: LE3933

Serial number: NIL

Options and accessories: NIL

Rating: AC 100-120V, 80W

Description of the EUT: NIL

Auxiliary Equipment and Cable Used during Test:

DESCRIPTION	MANUFACTURER	MODEL NO.(SHIELD)	S/N(LENGTH)
Computer	Acer	AG1720	1300148096
Keyboard	Shuangfeiyan	KB-3	
Mouse	JEEJA	M-01	
DVD player	Panasonic	DVD-S858	VC8SQ002056
U pad	Sandisk	-	
Insertion Unit(75ohm/50ohm)	R&S		
VGA cable		Unshield	1.20cm
HDMI cable		Unshield	1.20cm
TV generator	R&S	SFE	121193



4 Summary of Test Standards

Test Standards								
FCC Part 15 Subpart B PART 15 - RADIO FREQUENCY DEVICES								
10-1-12 Edition	Subpart B - Unintentional Radiators							

Report Number: 68.720.13.040.01 Page 5 of 67



5 Summary of Test Results

Technical Requirements												
FCC Part 15 Subpart B												
Test Condition Pages Test Test Result												
		Site	Pass	Fail	N/A							
15.107 Conducted Emission AC Power Port	8	Site 2	\boxtimes									
15.109 Spurious radiated emissions	22	Site 2	\boxtimes									
15.111 Antenna conducted power	64	Site 2										

Report Number: 68.720.13.040.01 Page 6 of 67



6 General Remarks

Remarks

This submittal(s) (test report) is intended for FCC ID: SMFLE3933 filing to comply with Section 15.107, 15.109 and 15.111 of the FCC Part 15, Subpart B Rules.

Model no LE-D3902 has the same technical construction including circuit diagram, PCB Layout, components and component layout, all electrical construction and mechanical construction with LE3933. The difference lies only in model name, brand of the different models for the marketing business. So EMC test is applied on LE3933, LE-D3902 is deemed to fulfill the requirement without further test.

SUMMARY:

All tests	according	to the	regulations	cited o	n page 5	were

- - Performed
- The Equipment Under Test

☐ - Not Performed

- - Fulfills the general approval requirements.
- ☐ **Does not** fulfill the general approval requirements.

Sample Received Date: 16 May 2013

Testing Start Date: 17 May 2013

Testing End Date: 22 May 2013

- Jiangsu TÜV Product Service Ltd. - Shenzhen Branch -

Prepared by:

Reviewed by:

Felis. Li

Felix Li EMC Project Engineer Zero Zhow

Tested by:

Zero Zhou EMC Test Engineer

Report Number: 68.720.13.040.01

Ken Li

EMC Project Manager



7 Technical Requirement

7.1 Conducted Emission

Test Method

- 1 The EUT was placed on a table, which is 0.8m above ground plane
- 2 The power line of the EUT is connected to the AC mains through a Artificial Mains Network (A.M.N.).
- 3 Maximum procedure was performed to ensure EUT compliance
- 4 A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions from both sides of AC line

Limit

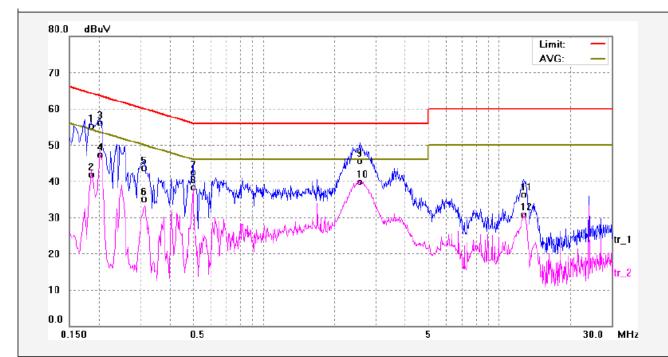
Frequency	QP Limit	AV Limit
MHz	dΒμV	dΒμV
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

Decreasing linearly with logarithm of the frequency

Report Number: 68.720.13.040.01

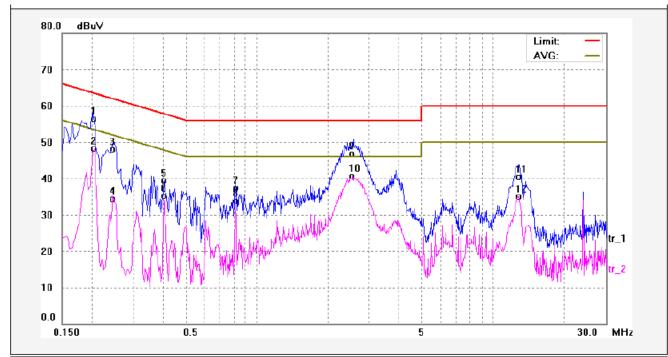


Product Type 39" LED TV M/N LE3933 **Operating Condition** DTV Test specification Live



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1860	44.61	9.83	54.44	64.21	-9.77	QP	
2	0.1860	31.34	9.83	41.17	54.21	-13.04	AVG	
3	0.2020	45.50	9.84	55.34	63.52	-8.18	QP	
4	0.2020	36.60	9.84	46.44	53.52	-7.08	AVG	
5	0.3116	33.02	9.87	42.89	59.93	-17.04	QP	
6	0.3116	24.39	9.87	34.26	49.93	-15.67	AVG	
7	0.5020	31.85	9.93	41.78	56.00	-14.22	QP	
8	0.5020	27.58	9.93	37.51	46.00	-8.49	AVG	
9	2.5740	34.93	10.02	44.95	56.00	-11.05	QP	
10	2.5740	29.10	10.02	39.12	46.00	-6.88	AVG	
11	12.7700	24.73	10.72	35.45	60.00	-24.55	QP	
12	12.7700	19.33	10.72	30.05	50.00	-19.95	AVG	

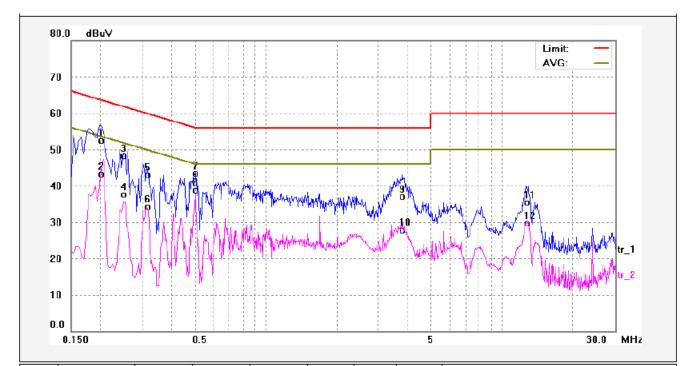




No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.2020	45.92	9.84	55.76	63.52	-7.76	QP	
2	0.2020	37.62	9.84	47.46	53.52	-6.06	AVG	
3	0.2468	37.43	9.85	47.28	61.86	-14.58	QP	
4	0.2468	23.88	9.85	33.73	51.86	-18.13	AVG	
5	0.4060	28.80	9.90	38.70	57.73	-19.03	QP	
6	0.4060	24.55	9.90	34.45	47.73	-13.28	AVG	
7	0.8139	26.73	9.97	36.70	56.00	-19.30	QP	
8	0.8139	23.12	9.97	33.09	46.00	-12.91	AVG	
9	2.5740	36.01	10.02	46.03	56.00	-9.97	QP	
10	2.5740	29.90	10.02	39.92	46.00	-6.08	AVG	
11	12.8060	28.90	10.72	39.62	60.00	-20.38	QP	
12	12.8060	23.55	10.72	34.27	50.00	-15.73	AVG	



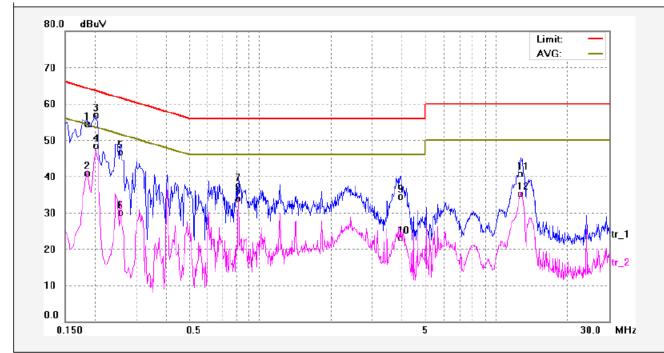
Product Type 39" LED TV M/N LE3933 **Operating Condition** ATV Test specification Live



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1986	41.81	9.84	51.65	63.66	-12.01	QP	
2	0.1986	32.57	9.84	42.41	53.66	-11.25	AVG	
3	0.2500	37.71	9.85	47.56	61.75	-14.19	QP	
4	0.2500	27.01	9.85	36.86	51.75	-14.89	AVG	
5	0.3140	32.51	9.87	42.38	59.86	-17.48	QP	
6	0.3140	23.69	9.87	33.56	49.86	-16.30	AVG	
7	0.5020	32.78	9.93	42.71	56.00	-13.29	QP	
8	0.5020	28.11	9.93	38.04	46.00	-7.96	AVG	
9	3.7860	26.15	10.06	36.21	56.00	-19.79	QP	
10	3.7860	16.99	10.06	27.05	46.00	-18.95	AVG	
11	12.6420	23.94	10.71	34.65	60.00	-25.35	QP	
12	12.6420	18.26	10.71	28.97	50.00	-21.03	AVG	



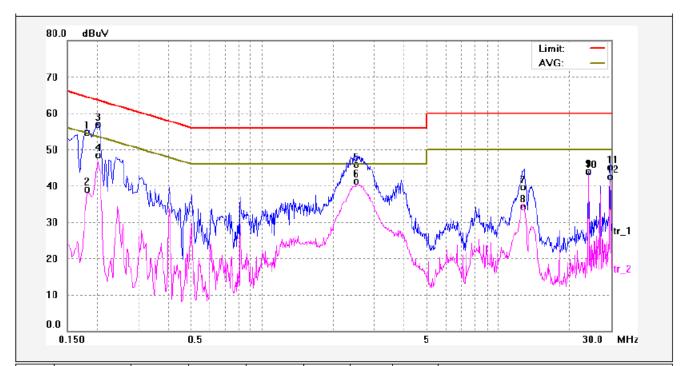
Product Type 39" LED TV M/N LE3933 **Operating Condition** ATV Test specification Neutral



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1860	43.89	9.83	53.72	64.21	-10.49	QP	
2	0.1860	30.33	9.83	40.16	54.21	-14.05	AVG	
3	0.2020	46.27	9.84	56.11	63.52	-7.41	QP	
4	0.2020	37.85	9.84	47.69	53.52	-5.83	AVG	
5	0.2580	35.96	9.86	45.82	61.49	-15.67	QP	
6	0.2580	19.52	9.86	29.38	51.49	-22.11	AVG	
7	0.8139	26.86	9.97	36.83	56.00	-19.17	QP	
8	0.8139	23.15	9.97	33.12	46.00	-12.88	AVG	
9	3.9380	23.56	10.06	33.62	56.00	-22.38	QP	
10	3.9380	12.19	10.06	22.25	46.00	-23.75	AVG	
11	12.7500	29.23	10.72	39.95	60.00	-20.05	QP	
12	12.7500	23.80	10.72	34.52	50.00	-15.48	AVG	



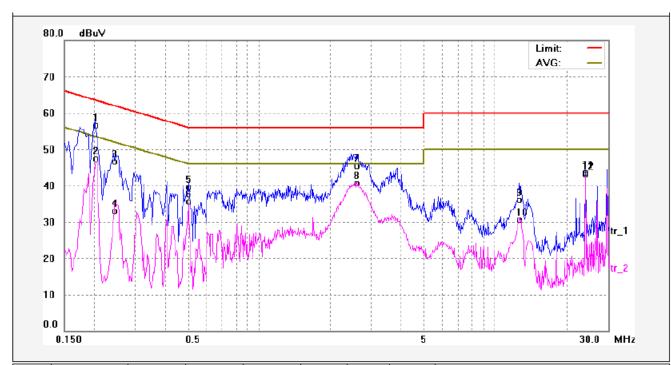
Product Type 39" LED TV LE3933 M/N **Operating Condition** HDMI Test specification Live



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1819	44.07	9.83	53.90	64.39	-10.49	QP	
2	0.1819	28.43	9.83	38.26	54.39	-16.13	AVG	
3	0.2020	46.34	9.84	56.18	63.52	-7.34	QP	
4	0.2020	37.85	9.84	47.69	53.52	-5.83	AVG	
5	2.5180	35.00	10.02	45.02	56.00	-10.98	QP	
6	2.5180	30.46	10.02	40.48	46.00	-5.52	AVG	
7	12.8780	28.18	10.73	38.91	60.00	-21.09	QP	
8	12.8780	22.71	10.73	33.44	50.00	-16.56	AVG	
9	24.0660	31.72	11.53	43.25	60.00	-16.75	QP	
10	24.0660	31.65	11.53	43.18	50.00	-6.82	AVG	
11	29.7020	32.08	12.27	44.35	60.00	-15.65	QP	
12	29.7020	29.42	12.27	41.69	50.00	-8.31	AVG	



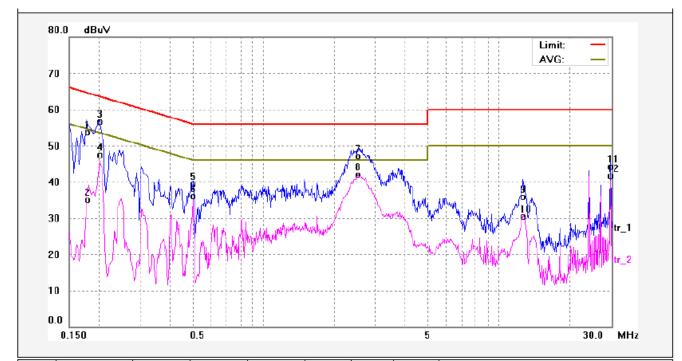
Product Type 39" LED TV M/N LE3933 **Operating Condition** HDMI Test specification Neutral Comment AC 120V/60Hz



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.2020	46.08	9.84	55.92	63.52	-7.60	QP	
2	0.2020	36.96	9.84	46.80	53.52	-6.72	AVG	
3	0.2429	36.06	9.85	45.91	61.99	-16.08	QP	
4	0.2429	22.49	9.85	32.34	51.99	-19.65	AVG	
5	0.5020	28.92	9.93	38.85	56.00	-17.15	QP	
6	0.5020	25.07	9.93	35.00	46.00	-11.00	AVG	
7	2.6340	34.67	10.02	44.69	56.00	-11.31	QP	
8	2.6340	29.91	10.02	39.93	46.00	-6.07	AVG	
9	12.7060	24.64	10.72	35.36	60.00	-24.64	QP	
10	12.7060	19.22	10.72	29.94	50.00	-20.06	AVG	
11	24.0660	31.29	11.53	42.82	60.00	-17.18	QP	
12	24.0660	30.97	11.53	42.50	50.00	-7.50	AVG	



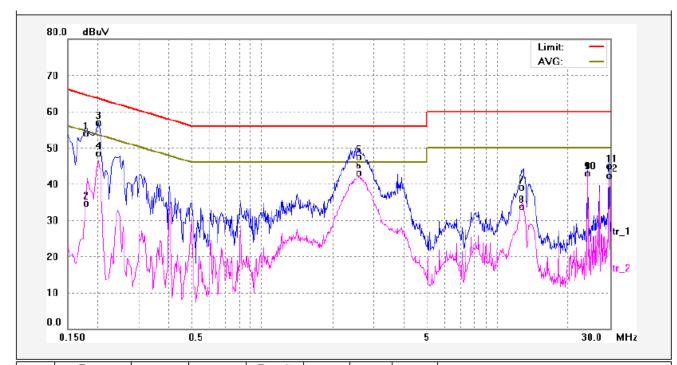
Product Type 39" LED TV M/N LE3933 **Operating Condition** VGA Test specification Live



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1780	43.17	9.82	52.99	64.57	-11.58	QP	
2	0.1780	24.56	9.82	34.38	54.57	-20.19	AVG	
3	0.2020	46.06	9.84	55.90	63.52	-7.62	QP	
4	0.2020	36.93	9.84	46.77	53.52	-6.75	AVG	
5	0.5020	28.83	9.93	38.76	56.00	-17.24	QP	
6	0.5020	25.28	9.93	35.21	46.00	-10.79	AVG	
7	2.5579	36.34	10.02	46.36	56.00	-9.64	QP	
8	2.5579	31.36	10.02	41.38	46.00	-4.62	AVG	
9	12.6620	24.49	10.71	35.20	60.00	-24.80	QP	
10	12.6620	19.05	10.71	29.76	50.00	-20.24	AVG	
11	29.7020	31.23	12.27	43.50	60.00	-16.50	QP	
12	29.7020	28.59	12.27	40.86	50.00	-9.14	AVG	



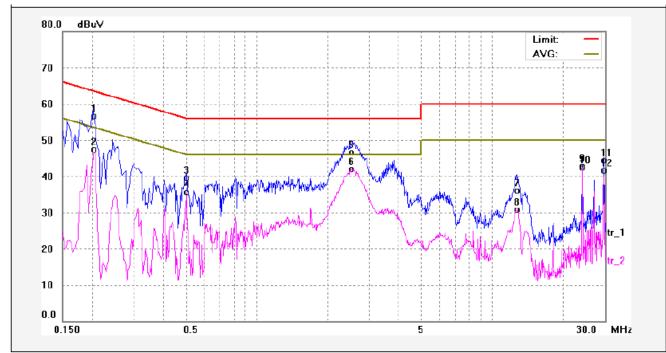
Product Type 39" LED TV M/N LE3933 **Operating Condition** VGA Test specification Neutral Comment AC 120V/60Hz



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1780	43.31	9.82	53.13	64.57	-11.44	QP	
2	0.1780	24.15	9.82	33.97	54.57	-20.60	AVG	
3	0.2020	46.35	9.84	56.19	63.52	-7.33	QP	
4	0.2020	37.86	9.84	47.70	53.52	-5.82	AVG	
5	2.5740	36.69	10.02	46.71	56.00	-9.29	QP	
6	2.5740	32.34	10.02	42.36	46.00	-3.64	AVG	
7	12.8580	27.50	10.73	38.23	60.00	-21.77	QP	
8	12.8580	22.11	10.73	32.84	50.00	-17.16	AVG	
9	24.0660	30.54	11.53	42.07	60.00	-17.93	QP	
10	24.0660	30.52	11.53	42.05	50.00	-7.95	AVG	
11	29.7020	31.90	12.27	44.17	60.00	-15.83	QP	
12	29.7020	29.24	12.27	41.51	50.00	-8.49	AVG	



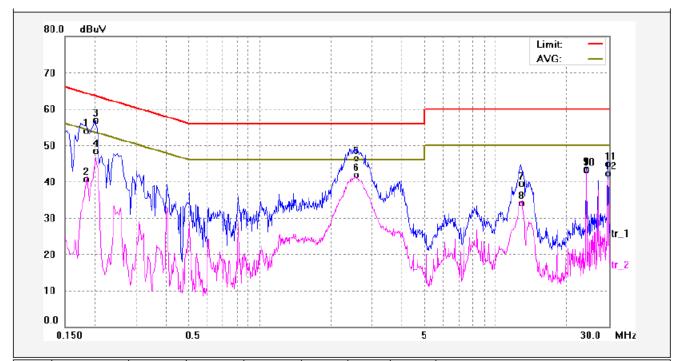
Product Type 39" LED TV M/N LE3933 **Operating Condition** USB Test specification Live



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.2020	46.09	9.84	55.93	63.52	-7.59	QP	
2	0.2020	36.92	9.84	46.76	53.52	-6.76	AVG	
3	0.5020	28.93	9.93	38.86	56.00	-17.14	QP	
4	0.5020	24.90	9.93	34.83	46.00	-11.17	AVG	
5	2.5340	35.81	10.02	45.83	56.00	-10.17	QP	
6	2.5340	31.31	10.02	41.33	46.00	-4.67	AVG	
7	12.7620	24.66	10.72	35.38	60.00	-24.62	QP	
8	12.7620	19.38	10.72	30.10	50.00	-19.90	AVG	
9	24.0660	30.61	11.53	42.14	60.00	-17.86	QP	
10	24.0660	30.16	11.53	41.69	50.00	-8.31	AVG	
11	29.7020	31.39	12.27	43.66	60.00	-16.34	QP	
12	29.7020	28.73	12.27	41.00	50.00	-9.00	AVG	



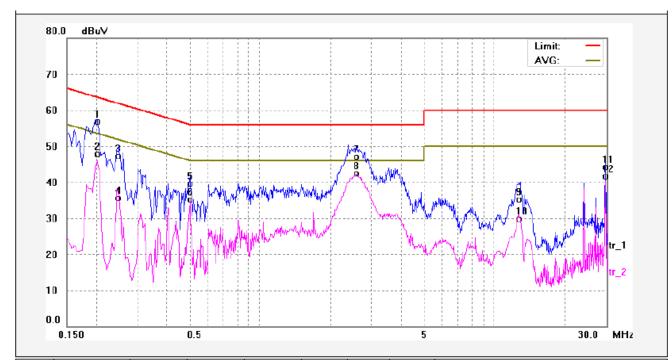
Product Type 39" LED TV M/N LE3933 **Operating Condition** USB Test specification Neutral Comment AC 120V/60Hz



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1860	43.56	9.83	53.39	64.21	-10.82	QP	
2	0.1860	30.13	9.83	39.96	54.21	-14.25	AVG	
3	0.2020	46.34	9.84	56.18	63.52	-7.34	QP	
4	0.2020	37.81	9.84	47.65	53.52	-5.87	AVG	
5	2.5700	35.66	10.02	45.68	56.00	-10.32	QP	
6	2.5700	31.04	10.02	41.06	46.00	-4.94	AVG	
7	12.8700	27.99	10.73	38.72	60.00	-21.28	QP	
8	12.8700	22.56	10.73	33.29	50.00	-16.71	AVG	
9	24.0700	31.27	11.53	42.80	60.00	-17.20	QP	
10	24.0700	30.88	11.53	42.41	50.00	-7.59	AVG	
11	29.7020	31.88	12.27	44.15	60.00	-15.85	QP	
12	29.7020	29.21	12.27	41.48	50.00	-8.52	AVG	

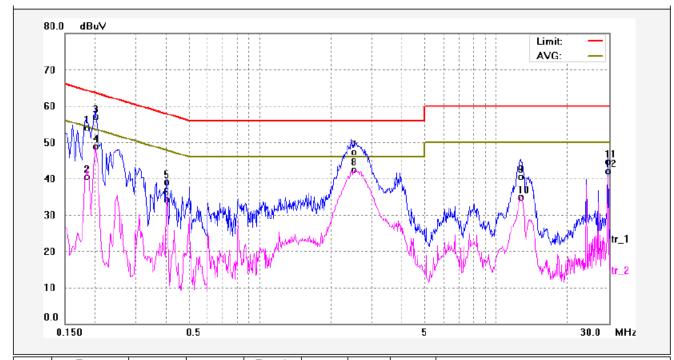


Product Type 39" LED TV M/N LE3933 **Operating Condition** AV Test specification Live



No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.2020	46.26	9.84	56.10	63.52	-7.42	QP	
2	0.2020	37.33	9.84	47.17	53.52	-6.35	AVG	
3	0.2500	36.64	9.85	46.49	61.75	-15.26	QP	
4	0.2500	25.03	9.85	34.88	51.75	-16.87	AVG	
5	0.5020	28.88	9.93	38.81	56.00	-17.19	QP	
6	0.5020	24.58	9.93	34.51	46.00	-11.49	AVG	
7	2.5700	36.30	10.02	46.32	56.00	-9.68	QP	
8	2.5700	31.74	10.02	41.76	46.00	-4.24	AVG	
9	12.8820	23.80	10.73	34.53	60.00	-25.47	QP	
10	12.8820	18.41	10.73	29.14	50.00	-20.86	AVG	
11	29.7020	31.32	12.27	43.59	60.00	-16.41	QP	
12	29.7020	28.69	12.27	40.96	50.00	-9.04	AVG	





No.	Freq. (MHz)	Reading (dBuV)	Factor (dB)	Result (dBuV)	Limit dBuV	Margin (dB)	Detector	Remark
1	0.1860	43.52	9.83	53.35	64.21	-10.86	QP	
2	0.1860	29.96	9.83	39.79	54.21	-14.42	AVG	
3	0.2020	46.54	9.84	56.38	63.52	-7.14	QP	
4	0.2020	38.26	9.84	48.10	53.52	-5.42	AVG	
5	0.4060	28.50	9.90	38.40	57.73	-19.33	QP	
6	0.4060	23.67	9.90	33.57	47.73	-14.16	AVG	
7	2.5020	36.47	10.02	46.49	56.00	-9.51	QP	
8	2.5020	31.64	10.02	41.66	46.00	-4.34	AVG	
9	12.7780	28.99	10.72	39.71	60.00	-20.29	QP	
10	12.7780	23.33	10.72	34.05	50.00	-15.95	AVG	
11	29.7020	31.62	12.27	43.89	60.00	-16.11	QP	
12	29.7020	28.97	12.27	41.24	50.00	-8.76	AVG	



Test Equipment List

Conducted Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL DUE DATE
EMI Test Receiver	R&S	ESCI	101178	August 8,2013
LISN	R&S	ENV216	101215	August 8,2013
Cable	Тор	TYPE16(3.5M)	EW02014-5	August 8,2013



7.2 Radiated emissions

Test Method

- 1 The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2 The turntable shall be rotated for 360 degrees to determine the position of maximum emission level
- 3 EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4 Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5 Each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

Limit

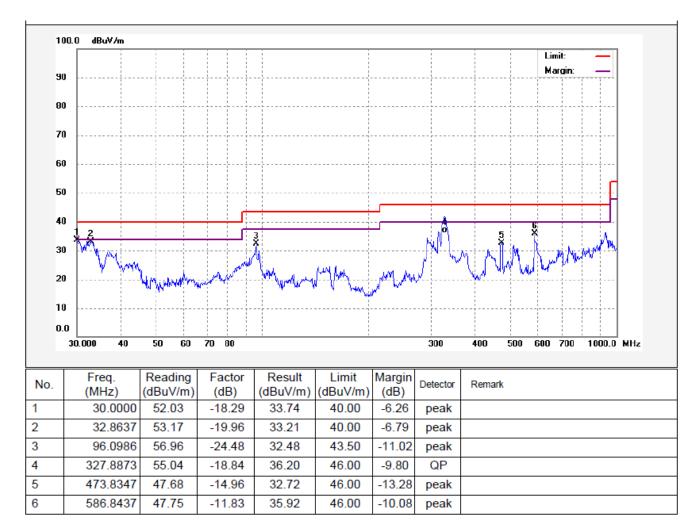
Frequency	Field Strength	Field Strength	Detector
MHz	uV/m	dBμV/m	
30-88	100	40	QP
88-216	150	43.5	QP
216-960	200	46	QP
960-1000	500	54	QP
Above 1000	500	54	AV
Above 1000	5000	74	PK

Remark: During the radiated emission test, all the channels in ATV mode, DTV mode are applied, and the results are met the limit of requirement, the test data which listed in the report are the typical channels of Low, Middle and High.



Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

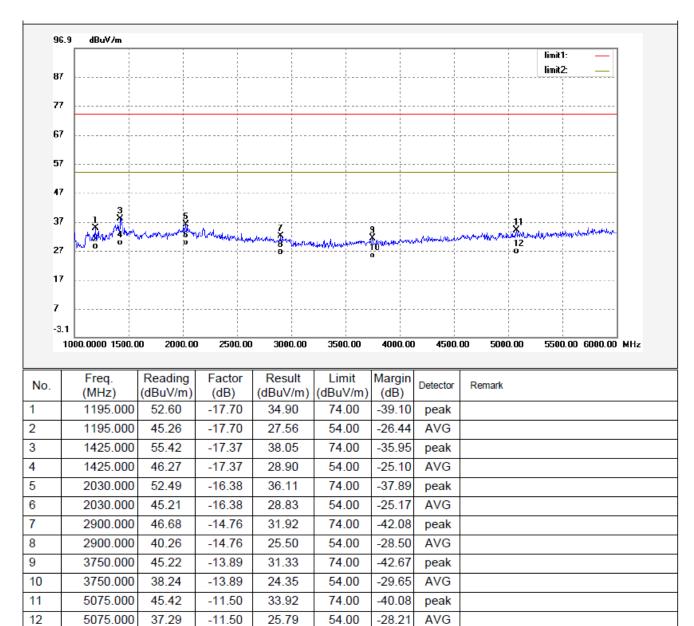
Test specification Vertical, low channel, 30MHz-1000MHz





Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

Test specification Vertical, low channel, 1000MHz-6000MHz



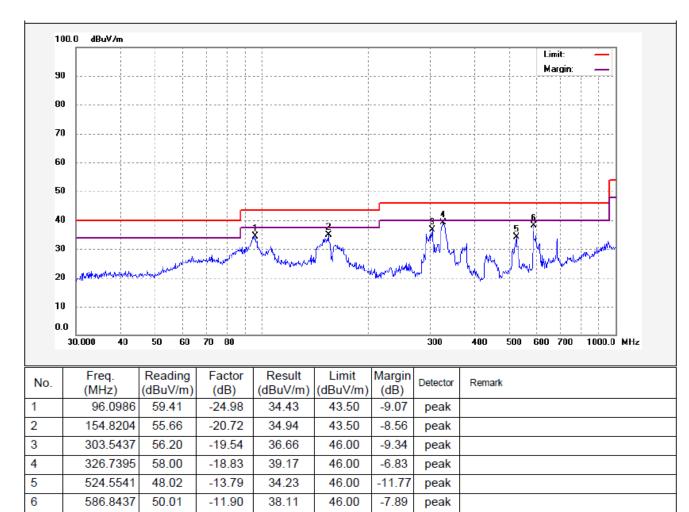


Product Service

Radiated Emission

Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

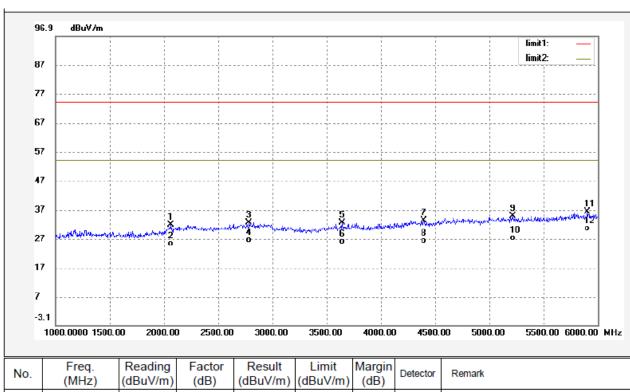
Test specification Horizontal, low channel,30MHz-1000MHz





Product Type 39" LED TV M/N LE3933 **Operating Condition** DTV

Test specification Horizontal, low channel,1000MHz-6000MHz

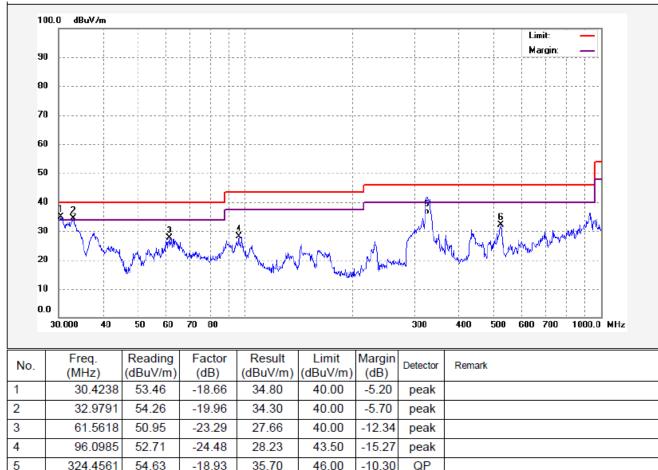


No.	Freq.	Reading	Factor	Result	Limit	Margin	Detector	Remark
INO.	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	Remain
1	2065.000	47.59	-15.90	31.69	74.00	-42.31	peak	
2	2065.000	40.23	-15.90	24.33	54.00	-29.67	AVG	
3	2785.000	47.41	-14.83	32.58	74.00	-41.42	peak	
4	2785.000	40.26	-14.83	25.43	54.00	-28.57	AVG	
5	3640.000	46.68	-14.10	32.58	74.00	-41.42	peak	
6	3640.000	39.25	-14.10	25.15	54.00	-28.85	AVG	
7	4395.000	46.30	-12.92	33.38	74.00	-40.62	peak	
8	4395.000	38.24	-12.92	25.32	54.00	-28.68	AVG	
9	5215.000	46.53	-11.74	34.79	74.00	-39.21	peak	
10	5215.000	38.01	-11.74	26.27	54.00	-27.73	AVG	
11	5905.000	47.05	-10.78	36.27	74.00	-37.73	peak	
12	5905.000	40.22	-10.78	29.44	54.00	-24.56	AVG	



Product Type 39" LED TV M/N LE3933 **Operating Condition** DTV

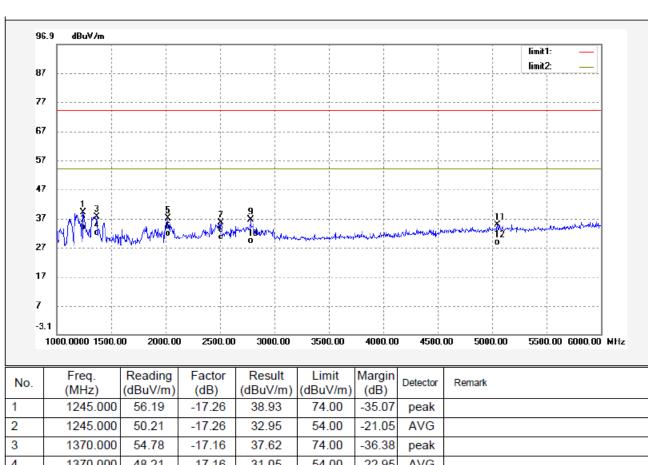
Test specification Vertical, middle channel, 30MHz-1000MHz





Product Type 39" LED TV M/N LE3933 **Operating Condition** DTV

Test specification Vertical, middle channel, 1000MHz-6000MHz

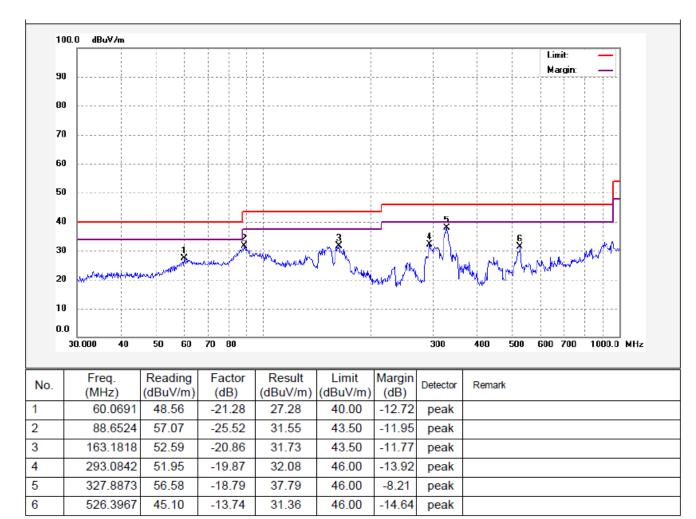


No.	Freq.	Reading	Factor	Result	I	Margin	Detector	Remark
140.	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Dottootoi	Nomen
1	1245.000	56.19	-17.26	38.93	74.00	-35.07	peak	
2	1245.000	50.21	-17.26	32.95	54.00	-21.05	AVG	
3	1370.000	54.78	-17.16	37.62	74.00	-36.38	peak	
4	1370.000	48.21	-17.16	31.05	54.00	-22.95	AVG	
5	2020.000	53.64	-16.54	37.10	74.00	-36.90	peak	
6	2020.000	47.36	-16.54	30.82	54.00	-23.18	AVG	
7	2510.000	51.21	-15.64	35.57	74.00	-38.43	peak	
8	2510.000	45.22	-15.64	29.58	54.00	-24.42	AVG	
9	2780.000	51.37	-14.84	36.53	74.00	-37.47	peak	
10	2780.000	43.14	-14.84	28.30	54.00	-25.70	AVG	
11	5050.000	46.28	-11.56	34.72	74.00	-39.28	peak	
12	5050.000	39.24	-11.56	27.68	54.00	-26.32	AVG	



Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

Test specification Horizontal, middle channel,30MHz-1000MHz

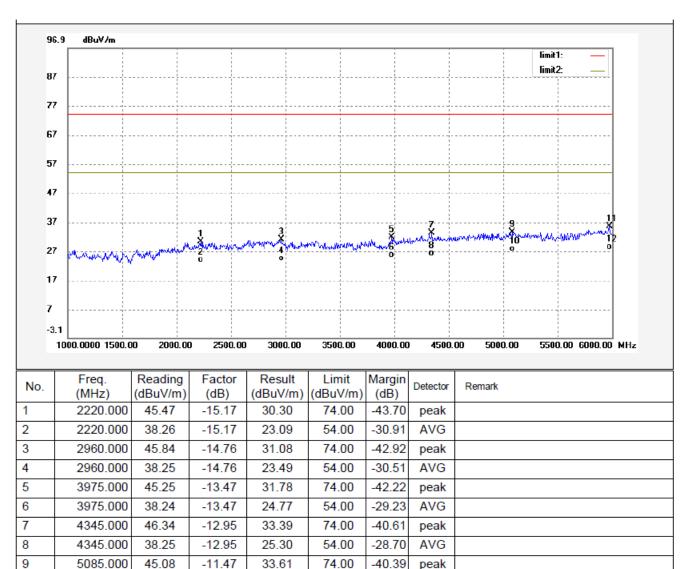




Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

Test specification Horizontal, middle channel,1000MHz-6000MHz

Comment : AC 120V/60Hz



5085.000

5975.000

5975.000

38.24

46.27

38.29

-11.47

-10.75

-10.75

26.77

35.52

27.54

54.00

74.00

54.00

-27.23

-38.48

-26.46

AVG

peak

AVG

10

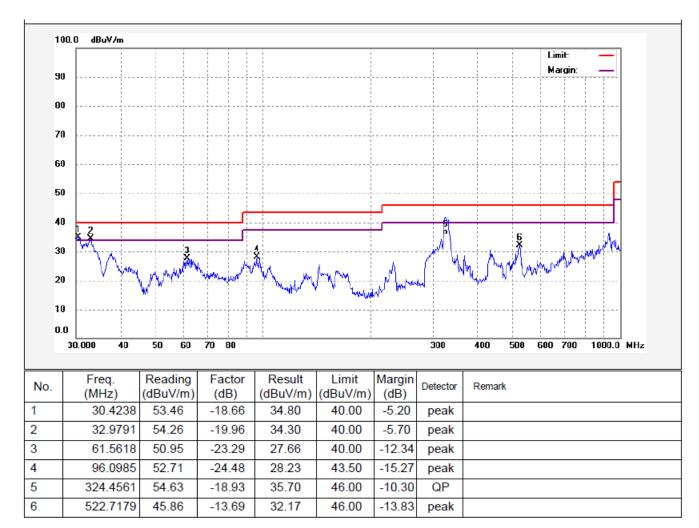
11

12



Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

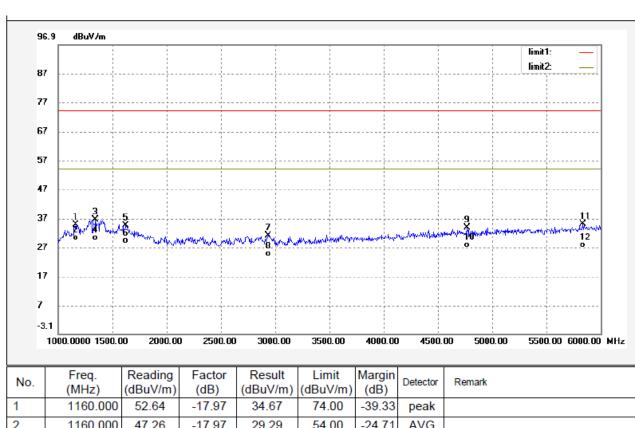
Test specification Vertical, high channel, 30MHz-1000MHz





Product Type 39" LED TV M/N LE3933 **Operating Condition** DTV

Test specification Vertical, high channel, 1000MHz-6000MHz

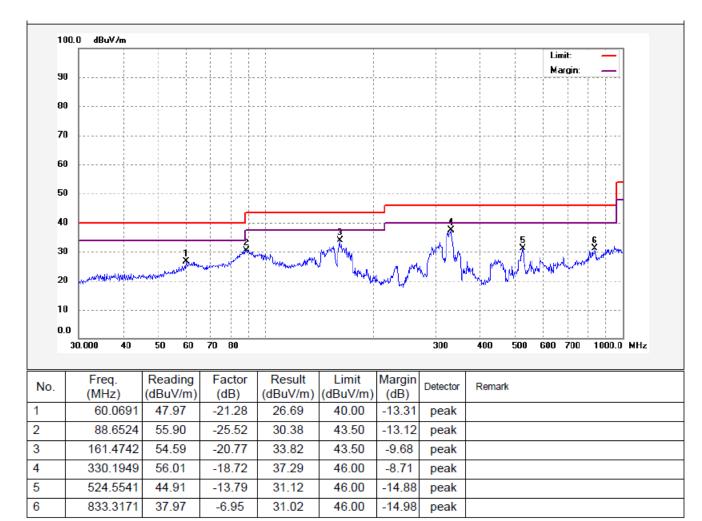


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1160.000	52.64	-17.97	34.67	74.00	-39.33	peak	
2	1160.000	47.26	-17.97	29.29	54.00	-24.71	AVG	
3	1345.000	53.68	-17.05	36.63	74.00	-37.37	peak	
4	1345.000	46.27	-17.05	29.22	54.00	-24.78	AVG	
5	1625.000	52.40	-17.93	34.47	74.00	-39.53	peak	
6	1625.000	46.23	-17.93	28.30	54.00	-25.70	AVG	
7	2935.000	45.92	-14.77	31.15	74.00	-42.85	peak	
8	2935.000	38.52	-14.77	23.75	54.00	-30.25	AVG	
9	4770.000	45.76	-12.02	33.74	74.00	-40.26	peak	
10	4770.000	38.70	-12.02	26.68	54.00	-27.32	AVG	
11	5835.000	45.84	-10.91	34.93	74.00	-39.07	peak	
12	5835.000	37.68	-10.91	26.77	54.00	-27.23	AVG	



Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

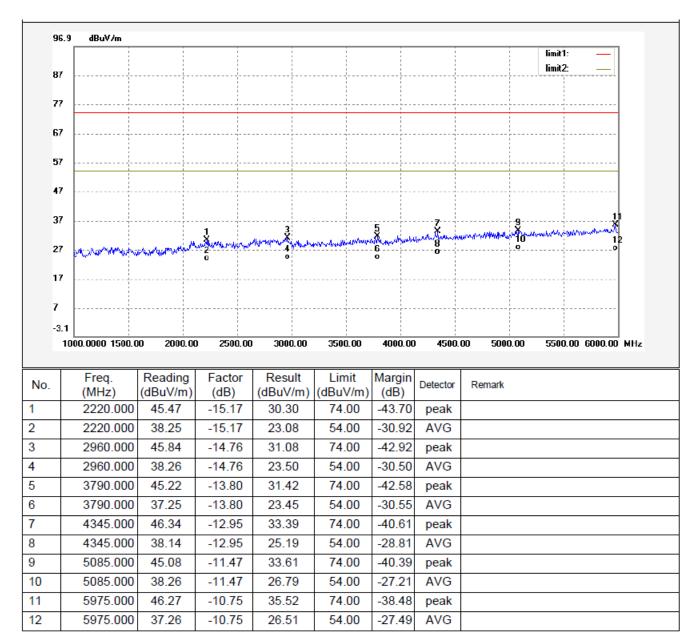
Test specification Horizontal, high channel, 30MHz-1000MHz





Product Type : 39" LED TV M/N : LE3933 Operating Condition : DTV

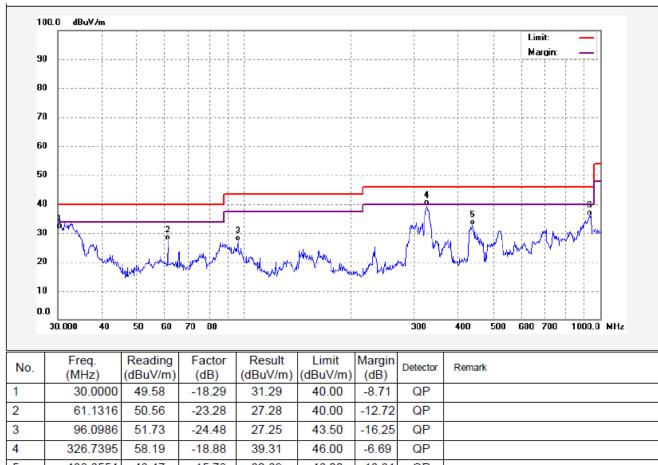
Test specification Horizontal, high channel, 1000MHz-6000MHz





Product Type 39" LED TV M/N LE3933 **Operating Condition ATV**

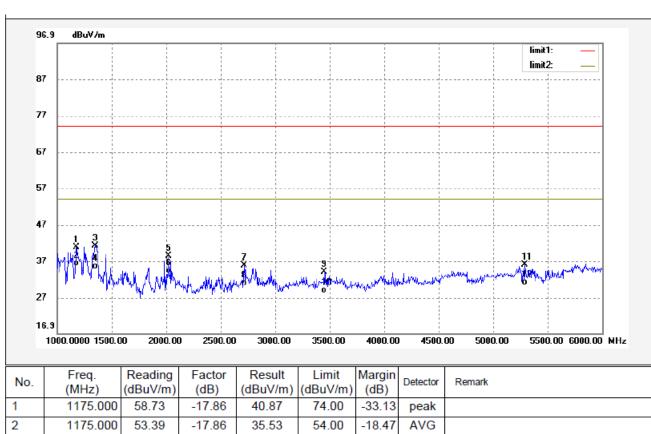
Test specification Vertical, low channel, 30MHz-1000MHz





Product Type 39" LED TV M/N LE3933 **Operating Condition** ATV

Test specification Vertical, low channel, 1000MHz-6000MHz

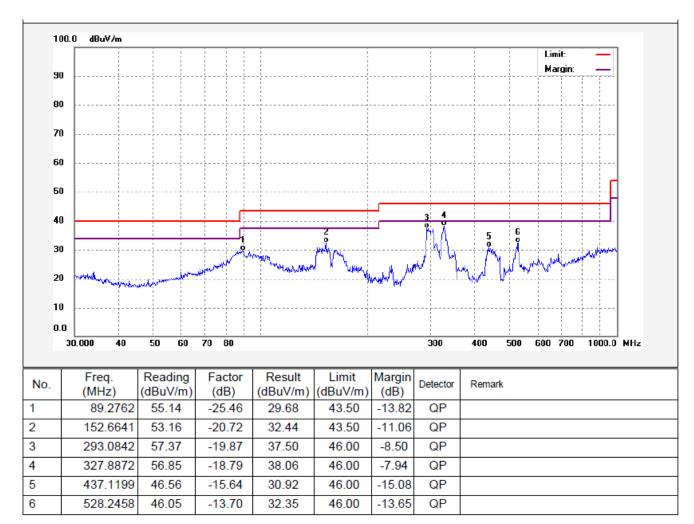


No.	Freq.	Reading	Factor	Result	Limit	Margin	Detector	r Remark
	(MHz)	(dBuV/m)	(dB)	(dBuV/m)	(dBuV/m)	(dB)	Detector	
1	1175.000	58.73	-17.86	40.87	74.00	-33.13	peak	
2	1175.000	53.39	-17.86	35.53	54.00	-18.47	AVG	
3	1350.000	58.29	-17.03	41.26	74.00	-32.74	peak	
4	1350.000	51.74	-17.03	34.71	54.00	-19.29	AVG	
5	2025.000	54.87	-16.46	38.41	74.00	-35.59	peak	
6	2025.000	50.08	-16.46	33.62	54.00	-20.38	AVG	
7	2715.000	50.81	-15.01	35.80	74.00	-38.20	peak	
8	2715.000	45.18	-15.01	30.17	54.00	-23.83	AVG	
9	3450.000	48.59	-14.62	33.97	74.00	-40.03	peak	
10	3450.000	42.88	-14.62	28.26	54.00	-25.74	AVG	
11	5290.000	47.98	-11.92	36.06	74.00	-37.94	peak	
12	5290.000	42.36	-11.92	30.44	54.00	-23.56	AVG	



Product Type : 39" LED TV M/N : LE3933 Operating Condition : ATV

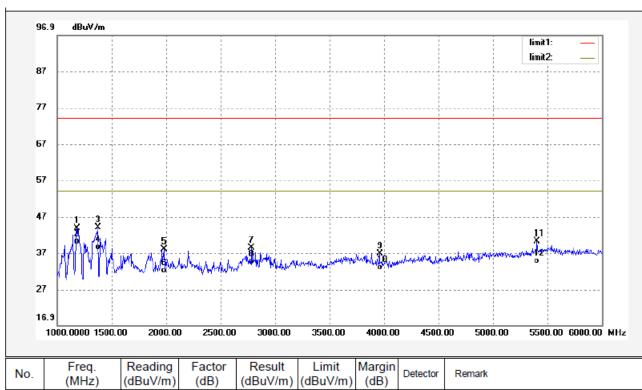
Test specification Horizontal, low channel, 30MHz-1000MHz





Product Type 39" LED TV M/N LE3933 **Operating Condition** ATV

Test specification Horizontal, low channel, 1000MHz-6000MHz

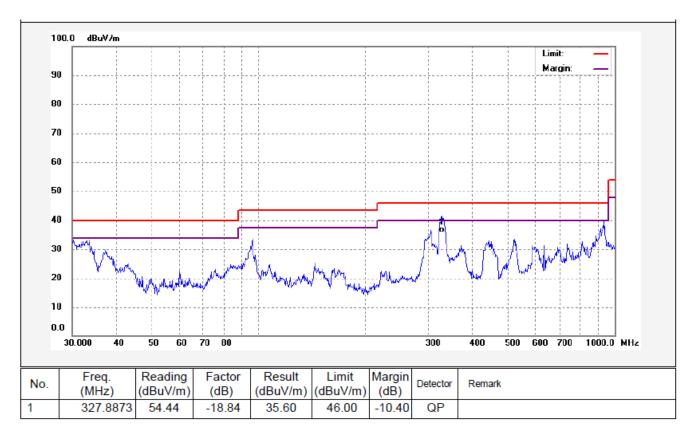


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1180.000	61.64	-17.81	43.83	74.00	-30.17	peak	
2	1180.000	57.15	-17.81	39.34	54.00	-14.66	AVG	
3	1375.000	61.24	-17.19	44.05	74.00	-29.95	peak	
4	1375.000	55.06	-17.19	37.87	54.00	-16.13	AVG	
5	1985.000	54.93	-16.92	38.01	74.00	-35.99	peak	
6	1985.000	48.23	-16.92	31.31	54.00	-22.69	AVG	
7	2785.000	53.30	-14.83	38.47	74.00	-35.53	peak	
8	2785.000	48.59	-14.83	33.76	54.00	-20.24	AVG	
9	3960.000	50.35	-13.49	36.86	74.00	-37.14	peak	
10	3960.000	45.74	-13.49	32.25	54.00	-21.75	AVG	
11	5405.000	51.97	-11.78	40.19	74.00	-33.81	peak	
12	5405.000	45.69	-11.78	33.91	54.00	-20.09	AVG	



Product Type 39" LED TV M/N LE3933 **Operating Condition** ATV

Test specification Vertical, middle channel, 30MHz-1000MHz

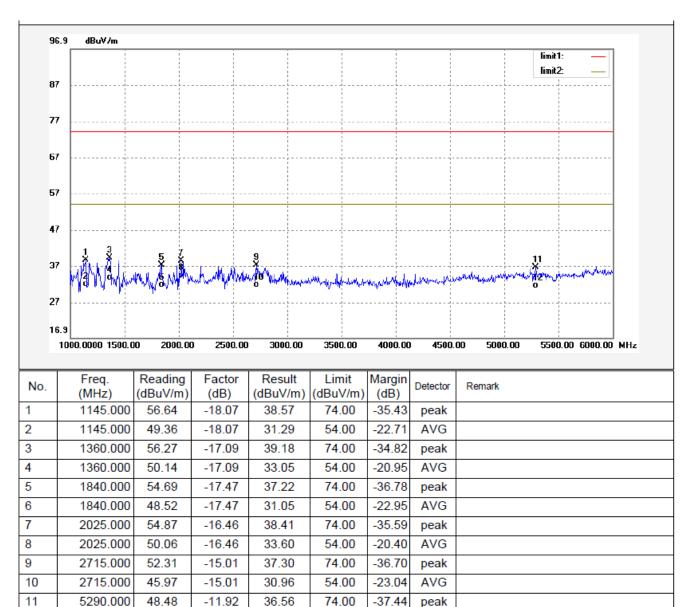




Product Type : 39" LED TV M/N : LE3933 Operating Condition : ATV

Test specification Vertical, middle channel, 1000MHz-6000MHz

Comment : AC 120V/60Hz



5290.000

42.66

-11.92

30.74

12

54.00

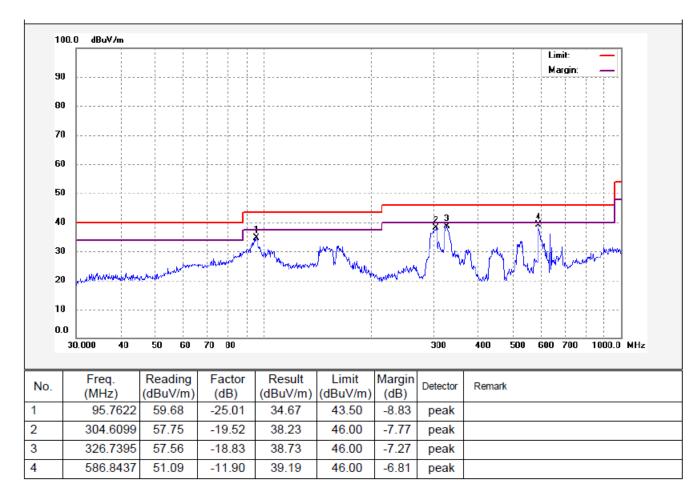
-23.26

AVG



Product Type 39" LED TV M/N LE3933 **Operating Condition** ATV

Test specification Horizontal, middle channel, 30MHz-1000MHz

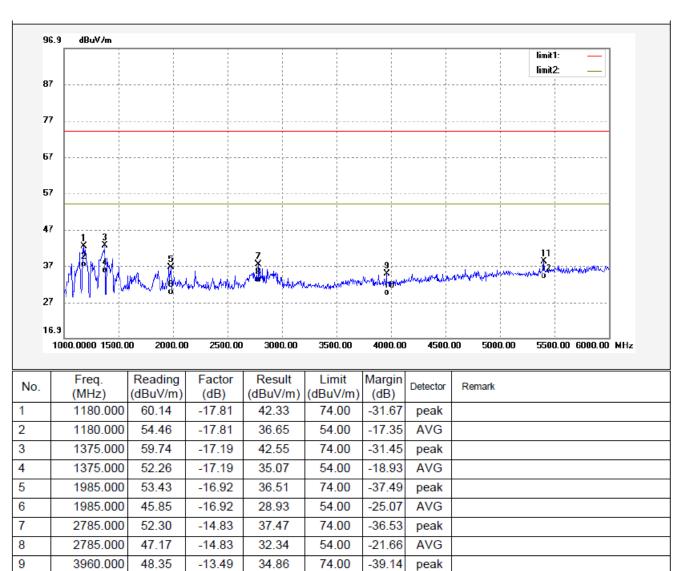




39" LED TV **Product Type** M/N LE3933 **Operating Condition** ATV

Test specification Horizontal, middle channel, 1000MHz-6000MHz

Comment AC 120V/60Hz



3960.000

3960.000

5405.000

5405.000

48.35

42.22

49.97

45.21

-13.49

-13.49

-11.78

-11.78

34.86

28.73

38.19

33.43

9

10

11

12

74.00

54.00

74.00

54.00

peak

AVG

peak

AVG

-25.27

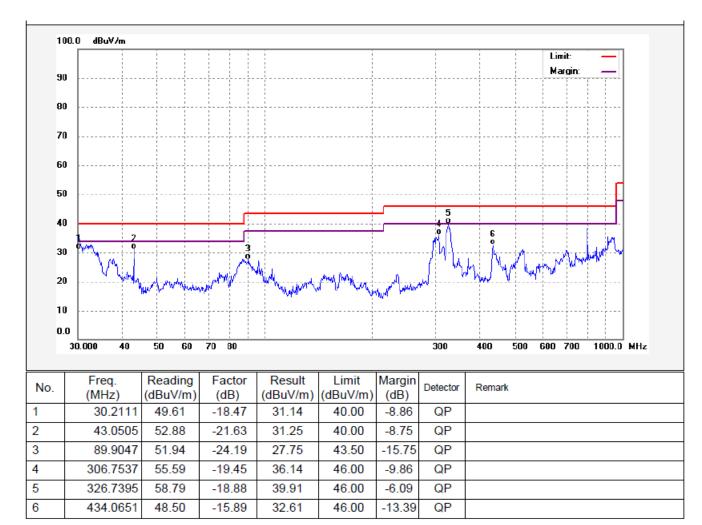
-35.81

-20.57



Product Type 39" LED TV M/N LE3933 **Operating Condition ATV**

Test specification Vertical, high channel, 30MHz-1000MHz

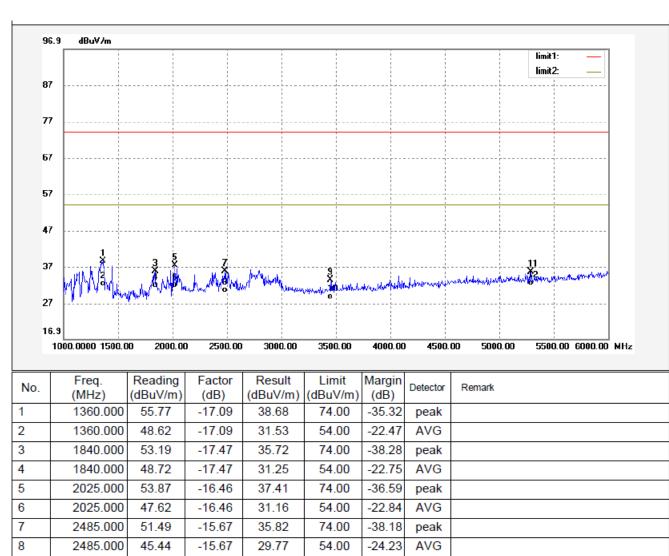




Product Type : 39" LED TV M/N : LE3933 Operating Condition : ATV

Test specification Vertical, high channel, 1000MHz-6000MHz

Comment : AC 120V/60Hz



3450.000

3450.000

5290.000

5290.000

48.09

42.58

47.48

43.65

-14.62

-14.62

-11.92

-11.92

33.47

27.96

35.56

31.73

9

10

11

12

74.00

54.00

74.00

54.00

-40.53

-26.04

-38.44

-22.27

peak

AVG

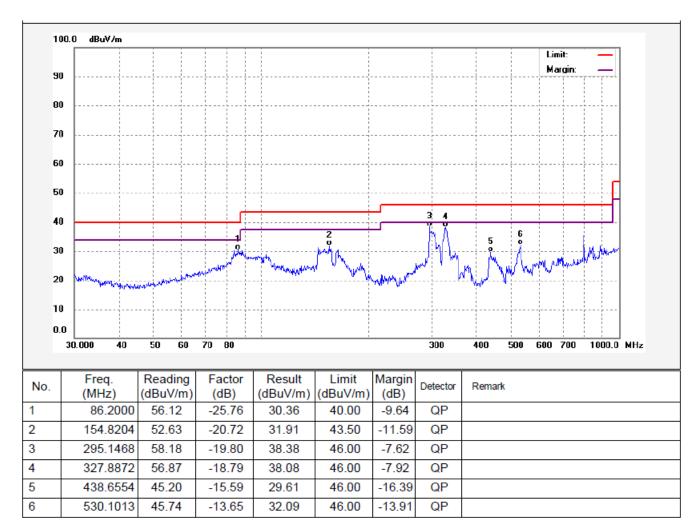
peak

AVG



Product Type : 39" LED TV M/N : LE3933 Operating Condition : ATV

Test specification Horizontal, high channel, 30MHz-1000MHz

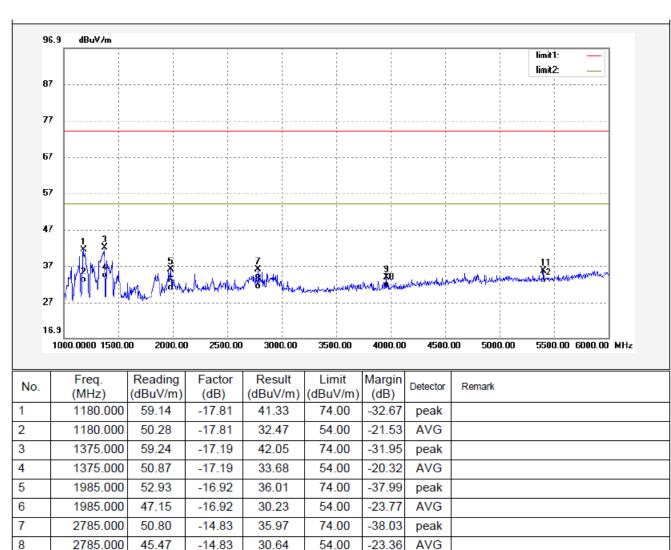




Product Type : 39" LED TV M/N : LE3933 Operating Condition : ATV

Test specification Horizontal, high channel, 1000MHz-6000MHz

Comment : AC 120V/60Hz



74.00

54.00

74.00

54.00

-40.14

-22.97

-38.31

-21.79

peak

AVG

peak

AVG

3960.000

3960.000

5405.000

5405.000

47.35

44.52

47.47

43.99

-13.49

-13.49

-11.78

-11.78

33.86

31.03

35.69

32.21

9

10

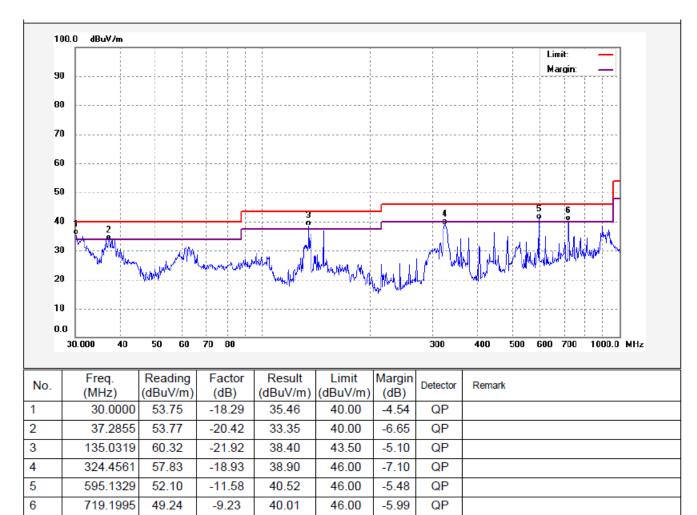
11

12



Product Type : 39" LED TV M/N : LE3933 Operating Condition : HDMI

Test specification Vertical, 30MHz-1000MHz

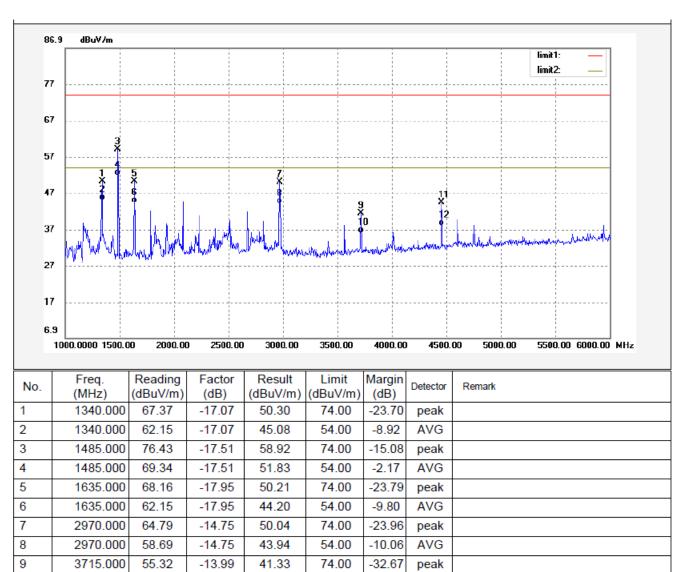




Product Type : 39" LED TV M/N : LE3933 Operating Condition : HDMI

Test specification Vertical, 1000MHz-6000MHz

Comment : AC 120V/60Hz



3715.000

4455.000

4455.000

50.05

57.27

50.85

-13.99

-12.84

-12.84

36.06

44.43

38.01

10

11

12

54.00

74.00

54.00

-17.94

-29.57

-15.99

AVG

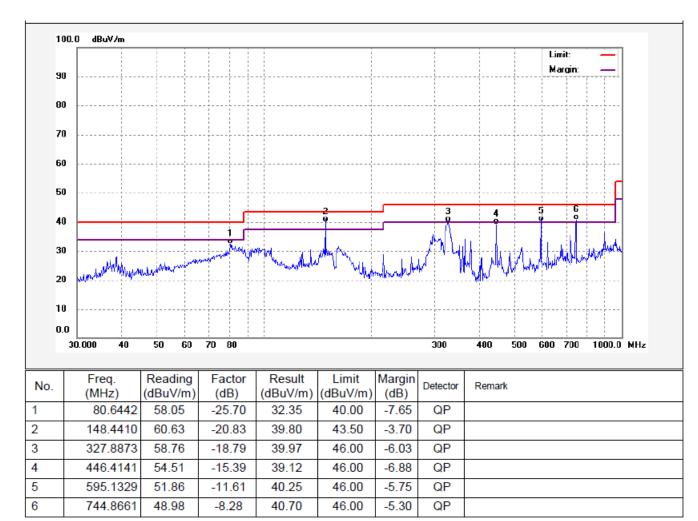
peak

AVG



Product Type : 39" LED TV M/N : LE3933 Operating Condition : HDMI

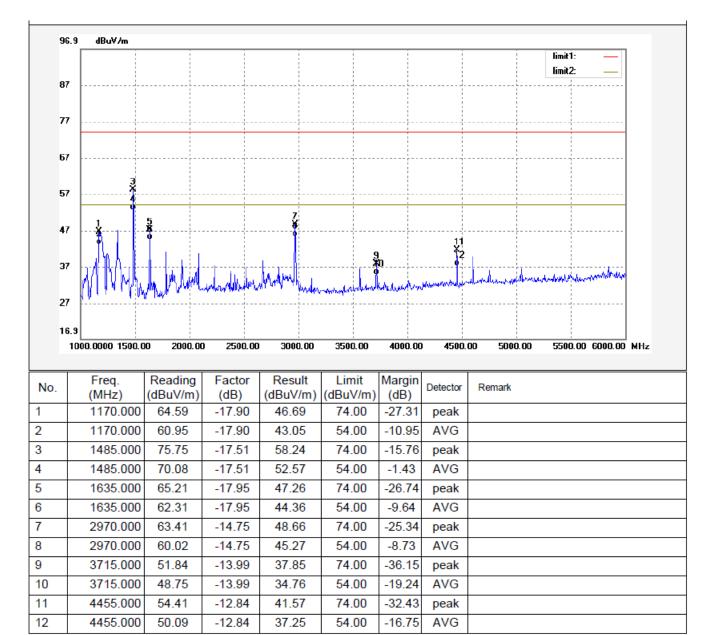
Test specification Horizontal, 30MHz-1000MHz





Product Type : 39" LED TV M/N : LE3933 Operating Condition : HDMI

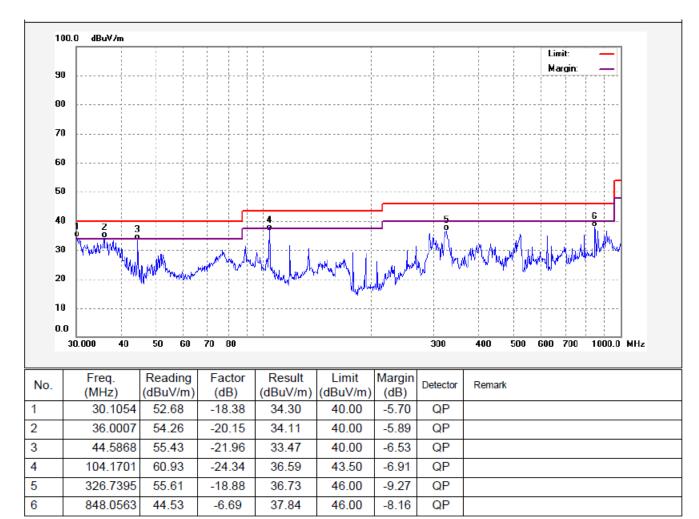
Test specification Horizontal, 1000MHz-6000MHz





Product Type : 39" LED TV M/N : LE3933 Operating Condition : VGA

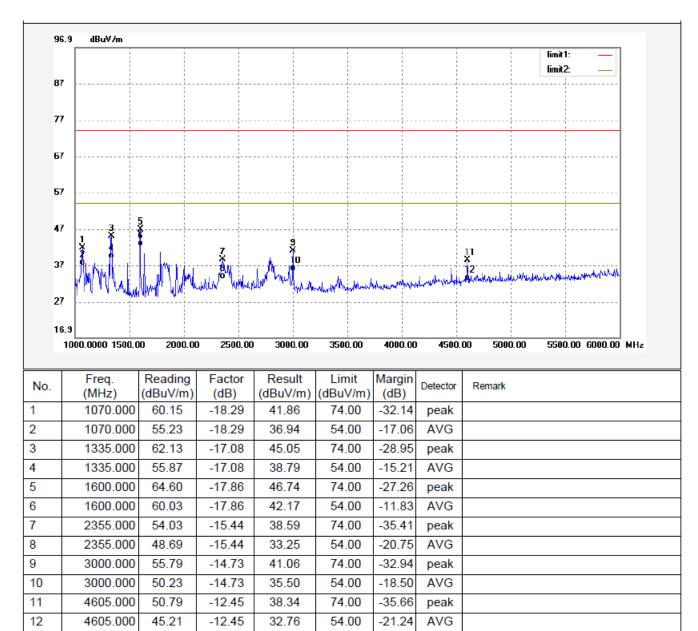
Test specification Vertical, 30MHz-1000MHz





Product Type : 39" LED TV M/N : LE3933 Operating Condition : VGA

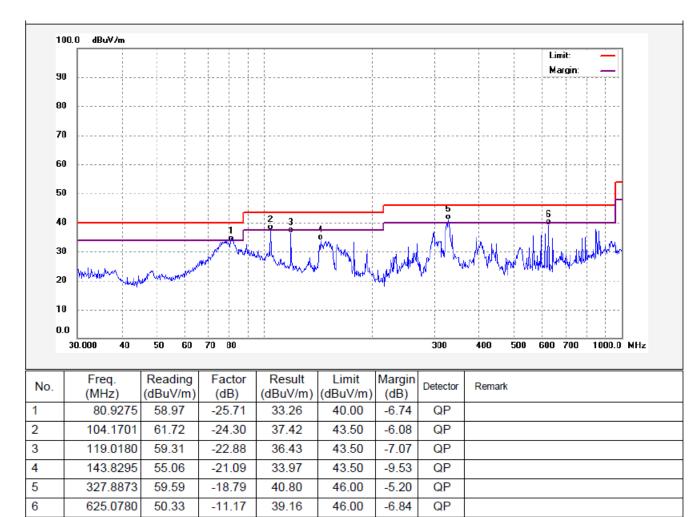
Test specification Vertical, 1000MHz-6000MHz





Product Type : 39" LED TV M/N : LE3933 Operating Condition : VGA

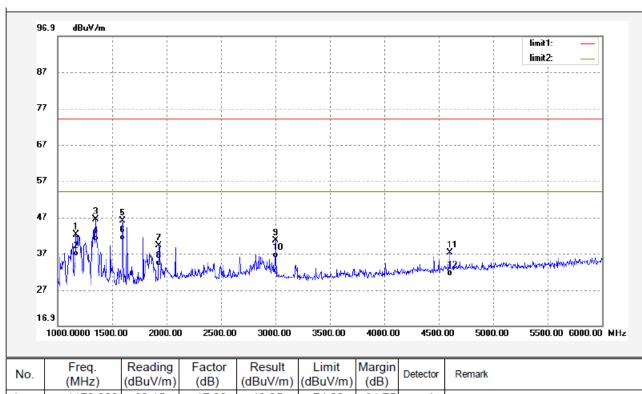
Test specification Horizontal, 30MHz-1000MHz





Product Type 39" LED TV LE3933 M/N **Operating Condition** VGA

Test specification Horizontal, 1000MHz-6000MHz

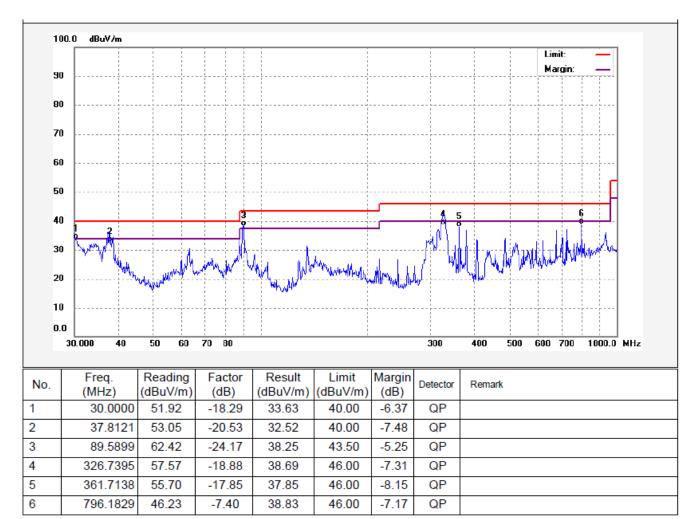


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1170.000	60.15	-17.90	42.25	74.00	-31.75	peak	
2	1170.000	54.12	-17.90	36.22	54.00	-17.78	AVG	
3	1350.000	63.40	-17.03	46.37	74.00	-27.63	peak	
4	1350.000	57.46	-17.03	40.43	54.00	-13.57	AVG	
5	1595.000	63.77	-17.85	45.92	74.00	-28.08	peak	
6	1595.000	58.47	-17.85	40.62	54.00	-13.38	AVG	
7	1930.000	56.33	-17.11	39.22	74.00	-34.78	peak	
8	1930.000	50.74	-17.11	33.63	54.00	-20.37	AVG	
9	3000.000	55.37	-14.73	40.64	74.00	-33.36	peak	
10	3000.000	50.60	-14.73	35.87	54.00	-18.13	AVG	
11	4605.000	49.75	-12.45	37.30	74.00	-36.70	peak	
12	4605.000	43.26	-12.45	30.81	54.00	-23.19	AVG	



Product Type : 39" LED TV M/N : LE3933 Operating Condition : USB

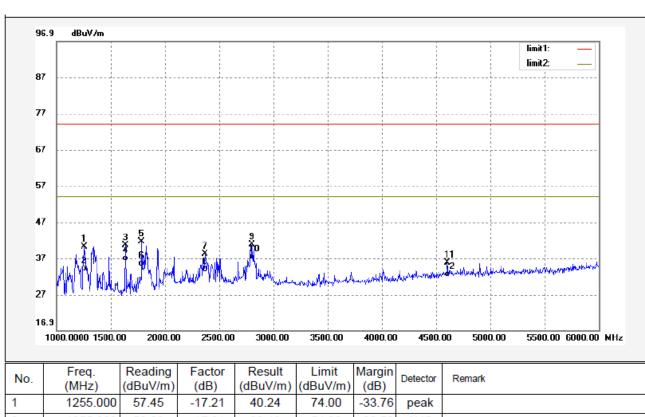
Test specification Vertical, 30MHz-1000MHz





Product Type 39" LED TV M/N LE3933 **Operating Condition** USB

Test specification vertical, 1000MHz-6000MHz

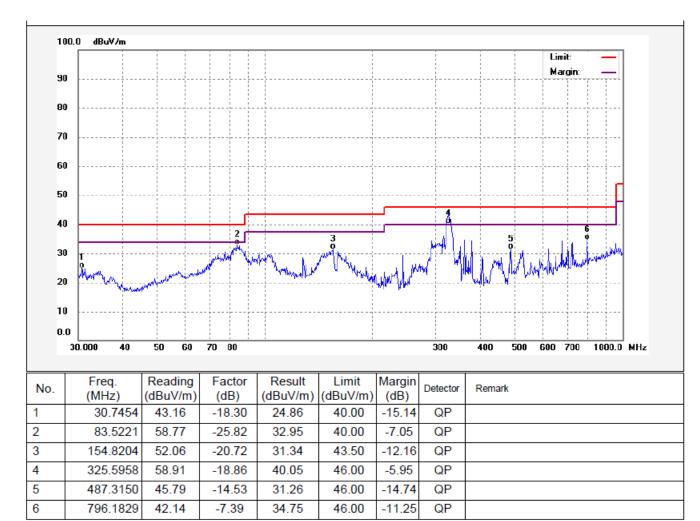


No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	1255.000	57.45	-17.21	40.24	74.00	-33.76	peak	
2	1255.000	50.69	-17.21	33.48	54.00	-20.52	AVG	
3	1635.000	58.52	-17.95	40.57	74.00	-33.43	peak	
4	1635.000	54.19	-17.95	36.24	54.00	-17.76	AVG	
5	1785.000	59.22	-17.70	41.52	74.00	-32.48	peak	
6	1785.000	52.42	-17.70	34.72	54.00	-19.28	AVG	
7	2370.000	53.74	-15.49	38.25	74.00	-35.75	peak	
8	2370.000	48.75	-15.49	33.26	54.00	-20.74	AVG	
9	2805.000	55.53	-14.78	40.75	74.00	-33.25	peak	
10	2805.000	51.47	-14.78	36.69	54.00	-17.31	AVG	
11	4605.000	48.21	-12.45	35.76	74.00	-38.24	peak	
12	4605.000	44.26	-12.45	31.81	54.00	-22.19	AVG	



Product Type : 39" LED TV M/N : LE3933 Operating Condition : USB

Test specification Horizontal, 30MHz-1000MHz

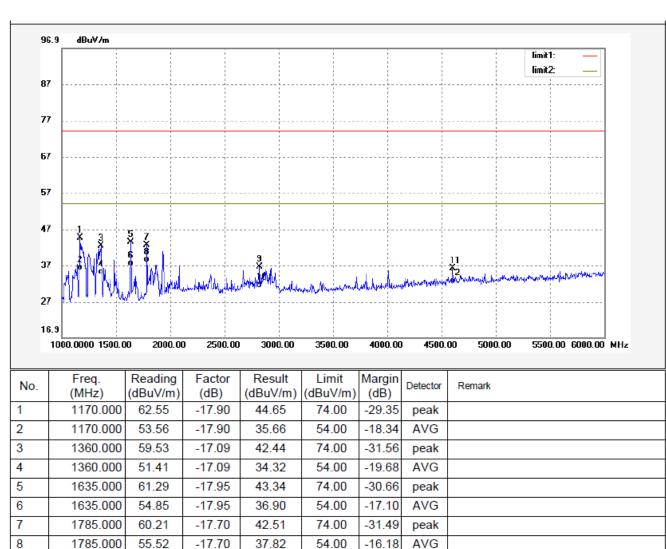




Product Type : 39" LED TV M/N : LE3933 Operating Condition : USB

Test specification Horizontal, 1000MHz-6000MHz

Comment : AC 120V/60Hz



2825.000

2825.000

4605.000

4605.000

51.40

45.67

48.70

44.52

-14.80

-14.80

-12.45

-12.45

36.60

30.87

36.25

32.07

9

10

11

12

74.00

54.00

74.00

54.00

-37.40

-23.13

-37.75

-21.93

peak

AVG

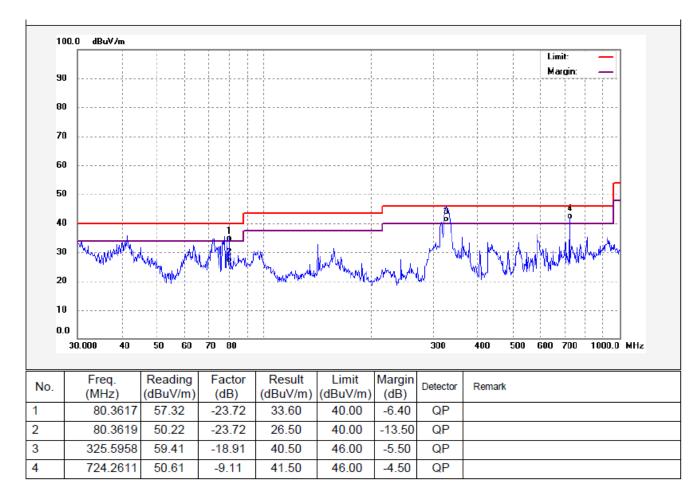
peak

AVG



Product Type 39" LED TV LE3933 M/N **Operating Condition** AV

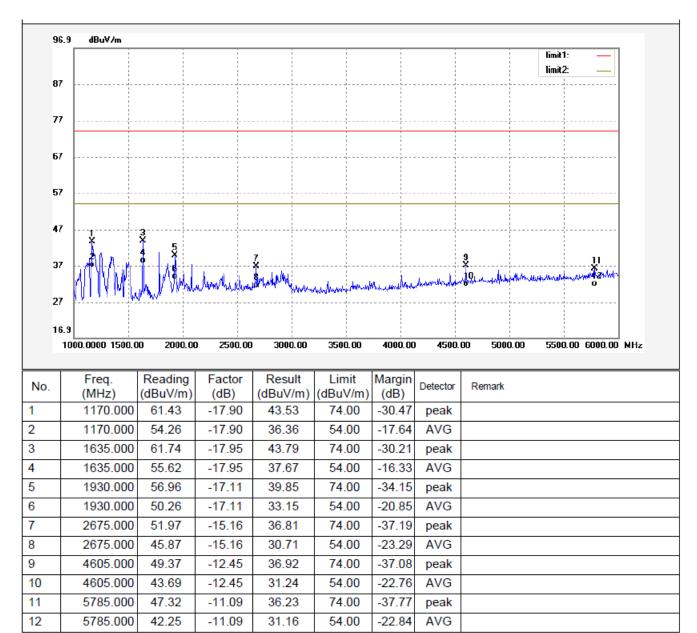
Test specification Vertical, 30MHz-1000MHz





Product Type : 39" LED TV M/N : LE3933 Operating Condition : AV

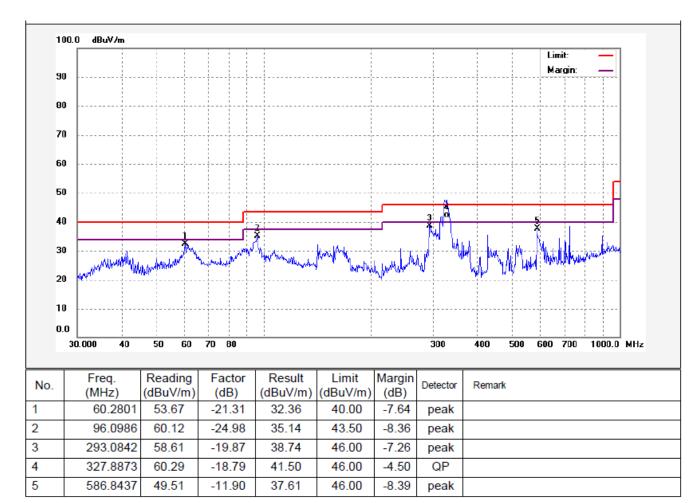
Test specification Vertical, 1000MHz-6000MHz





Product Type 39" LED TV LE3933 M/N **Operating Condition** AV

Test specification Horizontal, 30MHz-1000MHz

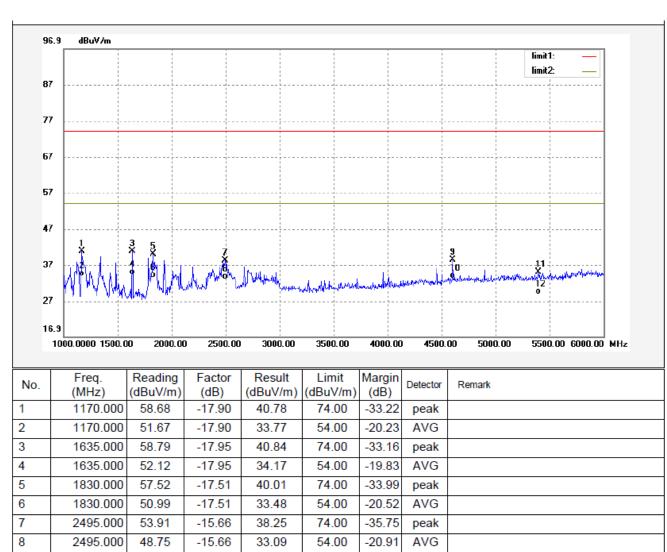




Product Type : 39" LED TV M/N : LE3933 Operating Condition : AV

Test specification Horizontal, 1000MHz-6000MHz

Comment : AC 120V/60Hz



74.00

54.00

74.00

54.00

-35.53

-20.71

-38.93

-25.14

peak

AVG

peak

AVG

4605.000

4605.000

5395.000

5395.000

50.92

45.74

46.87

40.66

-12.45

-12.45

-11.80

-11.80

38.47

33.29

35.07

28.86

9

10

11

12



Radiated Emission Test

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL DUE DATE
EMC Analyzer	Agilent	E7405A	MY45114943	August 8,2013
Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	August 8,2013
Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	August 8,2013
Broadband Preamplifier	SCHWARZBECK	BBV 9718	9718-148	August 8,2013
Coaxial Cable (above 1GHz)	SCHWARZBECK	AK 9515 H	EW02014-1	August 8,2013
Coaxial Cable (below 1GHz)	Тор	TYPE16(13M)	EW02014-4	August 8,2013
Positioning Controller	C&C LAB	CC-C-IF		
Color Monitor	SUNSPO	SP-14C		



7.3 Antenna conducted power

Test Method

- 1 The EUT was placed on a table, which is 0.8m above ground plane
- 2 Maximum procedures was performed to ensure EUT compliance
- 3 A impedance matching pad(75ohm/50ohm) is used for the test from the tuner to the receiver input port.
- 4 A EMI test receiver (R&S Test Receiver ESCS30) is used to test the emissions from the antenna port through the impedance matching pad.

Limit

Frequency	Power	Voltage	Detector
MHz	nW	dΒμV	
30-5000	2	51.8	PK

Remark: During the Antenna conducted power test, all the channels in ATV mode, DTV mode are applied, and the results are met the limit of requirement, the test data which listed in the report are the typical channels of Low Middle and High.



Antenna conducted power

Test Mode	DTV Low channel		Frequency range	30M-10	000MHz
Frequency (MHz)	Emission level (dBµv)	Reading level (dBµv)	Connection factor(dB)	Limit (dBµv)	Margin (dB)
39.72	38.77	25.07	13.7	51.8	13.03
88.03	37.49	23.69	13.8	51.8	14.31

Test Mode	DTV Middle channel		Frequency range	30M-20	000MHz
Frequency (MHz)	Emission level (dBµv)	Reading level (dBµv)	Connection factor(dB)	Limit (dBµv)	Margin (dB)
87.48	38.21	24.41	13.8	51.8	13.59
125.94	37.68	23.88	13.8	51.8	14.12

Test Mode	DTV High	channel	Frequency range	30M-5000MHz	
Frequency (MHz)	Emission level (dBµv)	Reading level (dBµv)	Connection factor(dB)	Limit (dBµv)	Margin (dB)
796.98	47.52	33.22	14.3	51.8	4.28
939.12	48.32	33.82	14.5	51.8	3.48

Report Number: 68.720.13.040.01 Page 65 of 67



Antenna conducted power

Test Mode	ATV Low	channel	Frequency range	30M-1000MHz	
Frequency (MHz)	Emission level (dBµv)	Reading level (dBµv)	Connection factor(dB)	Limit (dBµv)	Margin (dB)
177.12	38.07	24.27	13.8	51.8	13.73
947.94	41.35	26.85	14.5	51.8	10.45

Test Mode	ATV Midd	le channel	Frequency range	30M-50	000MHz
Frequency (MHz)	Emission level (dBµv)	Reading level (dBµv)	Connection factor(dB)	Limit (dBµv)	Margin (dB)
196.98	40.14	26.34	13.8	51.8	11.66
944.34	42.88	28.38	14.5	51.8	8.92

Test Mode	ATV High	channel	Frequency range	30M-5000MHz	
Frequency (MHz)	Emission level (dBµv)	Reading level (dBµv)	Connection factor(dB)	Limit (dBµv)	Margin (dB)
327.98	37.33	23.33	14	51.8	14.47
537.6	38.2	24	14.2	51.8	13.6
944.46	45.72	31.22	14.5	51.8	6.08



Test Equipment List

DESCRIPTION	MANUFACTURER	MODEL NO.	SERIAL NO.	CAL DUE DATE
EMI Test Receiver	R&S	ESCI	101178	August 8,2013
LISN	R&S	ENV216	101215	August 8,2013
Cable	Тор	TYPE16(3.5M)	EW02014-5	August 8,2013

Report Number: 68.720.13.040.01 Page 67 of 67